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## ABSTRACT OF THE DISCLOSURE

A radio equipment separates a signal from a specific terminal among signals from adaptive array antennas, based on a reception weight vector calculated by a reception weight vector calculator. A reception response vector calculator draws out a reception response vector of a propagation path of the signal from the specific terminal. A correlation operation and Doppler frequency estimating circuit calculates a correlation value between reception response vectors of corresponding slots of continuous frames, and estimates a corresponding Doppler frequency based on a correspondence found in advance. A transmission response vector estimator predicts a transmission response vector, by performing an extrapolation process in accordance with the estimated Doppler frequency.